Brief Description of Requirements for Nutrient Standard Menu Planning Software

The specifications and requirements for software programs developed for Nutrient Standard Menu Planning (NSMP) and in conducting nutrient analyses that meet School Meals Initiative (SMI) requirements in the National School Lunch and Breakfast Programs are summarized below. For detailed information about the specifications and requirements refer to the support materials for developers found at the Healthy Meals Resource System at http://healthymeals.nal.usda.gov/softwaresupport.html or request a printed packet of materials from the USDA's Food and Nutrition Service (FNS) at npartridge@nal.usda.gov. Nutrient Standard Menu Planning software programs that meet the specifications and requirements for use in Child Nutrition Programs must comply with the following criteria:

All files and fields from the Child Nutrition Database (CN Database) must be incorporated into the software program. Information provided by the CN Database cannot be altered by users; however user-entered information can be edited or deleted.

New food items must be able to be entered locally by the user from information provided in a manufacturer's fact sheet or food label in nutrients per serving based upon gram weight or specific weight, or percent of the Daily Reference Value (DRV). The software program must automatically convert between measures for weight and, if available, volume at the recipe development and menu planning levels.

The user must be able to enter recipes. The software program must produce a recipe report that includes the recipe code number, recipe name, serving/portion size, yield of the recipe based on number of servings, ingredients, the amount of each ingredient in units appropriate for food service, preparation instructions, and nutrient value of the recipe per serving or per 100 g (with nutrient changes calculated due to moisture/fat factors). The Recipe Nutrient Composition Report must contain the nutrient value contributed by each ingredient and the total nutrient value of the recipe per serving or per 100 g. The yield of the recipe must be able to be accurately adjusted to meet the needs of the food service without degrading the base recipe. A Recipe/Ingredient Cross Reference report must identify recipes that contain a certain food ingredient.

Menus for a specific site must be able to be developed and copied to another site or date range and the serving sizes adjusted for various age groups. Menu Reports must be available in both calendar and report formats. A Menu Production Report must be printable for use by food service workers to determine the quantities and serving sizes of food to prepare for a specific site.

The nutrient standards provided by USDA (individual ages, age ranges, grade ranges, and age 51+) must be incorporated into the software program and used for comparison in nutrient analyses. The user must be able to create a new nutrient standard (e.g. age 5-11), simply by entering the age or grade range of the new grouping.

A weighted nutrient analysis of an individual menu or range of menu dates must be provided. A summary of the calculated nutrient value of the menu is then compared to the nutrient standards of a selected age group and discrepancies from the standard are highlighted.

The user must be able to create a printable report that includes the composition of all food items and recipes in the database (CN Database and local) and that contains all required nutrients (calories, carbohydrate, protein, fat, cholesterol, saturated fat, vitamin A, vitamin C, iron, calcium, sodium, fiber, and the percentage of calories from protein, carbohydrate, fat, and saturated fat for recipes and menus). The software program must search the database for food items containing specific nutrients, so that menus can be adjusted to meet the nutrient standards.

The training documents, user's manual, and other support materials must be presented in a complete, sequential, easy to understand format. The developer must have a system to update the database whenever a new release of the CN Database is available (usually released annually).

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